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Abstract

Steers on a late spring burned bluestem pasture gained 1.4 lbs daily during the summer compared with 1.0 lb. by steers on a nonburned pasture. All steers were implanted with Ralgro at the start of the grazing season (May 1) and half in each pasture were reimplanted July 15. Reimplanting did not affect weight gain.

Keywords

Cattlemen's Day, 1981; Report of progress (Kansas State University. Agricultural Experiment Station); 394; Beef; Gain; Steer; Implants; Burned vs nonburned bluestem

Steer Gains on Burned and Nonburned Bluestem Pasture and Reimplanting with Ralgro[1] at Mid-summer

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Summary

Steers on a late spring burned bluestem pasture gained 1.4 lbs daily during the summer compared with 1.0 lb. by steers on a nonburned pasture. All steers were implanted with Ralgro at the start of the grazing season (May 1) and half in each pasture were reimplanted July 15. Reimplanting did not affect weight gain.

Introduction

For many years we have studied the impact of late-spring burning of native bluestem pasture on vegetation and cattle. The effect on steer gains in 1980 is reported here. Steers grazing either burned or nonburned pastures have gained more when implanted with Ralgro at the start of the grazing season. In this study, a second implant was given at midsummer to determine if a further increase in gain could be obtained.

Experimental Procedure

The 44-acre pasture burned annually was burned about May 1. The nonburned pasture is 60 acres. They were grazed by yearling Angus steers with an initial weight of about 475 lbs. Weights were taken in the morning after steers were penned without feed or water overnight. Both pastures were stocked at 3.3 acres per steer from May 1 to October 2 (154 days). All steers were implanted with Ralgro May 1 and half in each pasture were reimplanted July 15.

Results and Discussion

Annual burning increased steer gains ($P<.01$) by .4 pound per head daily. Nearly all the increase occurred between May 1 and July 15. In the past, steers on burned pastures usually gained more but not so much as in 1980. The 1980 gains may have resulted from a combination of improved digestibility and increased forage intake. Burning maintains the grass longer in a more immature, palatable stage.

Ralgro usually has increased summer steer gains on grass. In the 1980 trial, and one conducted in 1977, (Kansas Rpt. of Progress 320) steers implanted at the start of grazing and reimplanted at mid-summer gained no more than those implanted only once.

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[1]Ralgro (Zeranol) is a product of International Minerals and Chemical Corporation.

Table 25.1. Steer gains on burned and nonburned bluestem pasture May 1 to October 2, 1980 (154 days).

	Burned	Non-burned
Pasture size	44 acres	60 acres
Acres per steer	3.3	3.3
Steers per pasture	13	18
Initial wt., lbs.	485	465
Gain, lbs.	215	155
Daily gain, lbs.	1.40[a]	1.00[b]

[a,b]Means with different superscripts differ significantly ($P<.01$).

Table 25.2. Reimplanting grazing yearling steers with Ralgro at mid-summer July 15 to October 2, 1980 (79 days)[a]

	Burned		Not burned	
	Implanted May 1	Implanted May 1 and July 15	Implanted May 1	Implanted May 1 and July 15
No. of steers	7	6	9	9
Initial wt., lbs.	630	619	543	549
Final wt., lbs.	714	689	614	618
Gain, lbs.	84	70	71	69
Daily gain, lbs	1.06	0.88	0.90	0.88

[a]There were no significant differences in daily gains.